

Title (en)

Constant pressure variable flow implantable pump.

Title (de)

Implantierbare Konstantdruckpumpe mit variablem Durchfluss.

Title (fr)

Pompe implantable à pression constante et débit variable.

Publication

EP 0344895 A2 19891206 (EN)

Application

EP 89303620 A 19890412

Priority

US 18091688 A 19880413

Abstract (en)

A variable flow constant pressure implantable pump employs an in-line needle restrictor (12) having a variable insertion distance in a capillary (10). The degree of insertion determines the effective restriction within the capillary. The restrictor may be repositioned following implantation to vary the drug delivery rate by changing the effective restriction in the capillary. Various couplings may be used such that an auxiliary or bolus port (92) delivers infusate directly into the outlet catheter (24) so that medication from the main chamber (22) does not pass through the auxiliary chamber. A combination of double lumen catheters (106) and T-connectors (100) are employed to provide parallel infusion paths.

IPC 1-7

A61M 5/14; **F16L 55/02**

IPC 8 full level

A61M 5/14 (2006.01); **A61M 5/142** (2006.01); **A61M 5/168** (2006.01); **F16L 55/02** (2006.01); **F16L 55/027** (2006.01); **G05D 7/01** (2006.01)

CPC (source: EP US)

A61M 5/141 (2013.01 - EP US); **A61M 5/14276** (2013.01 - EP US); **A61M 5/16881** (2013.01 - EP US); **F16L 55/027** (2013.01 - EP US); **G05D 7/0186** (2013.01 - EP US); **A61M 5/16813** (2013.01 - EP US); **A61M 2205/3507** (2013.01 - EP US); **Y10S 128/12** (2013.01 - EP US)

Cited by

EP1888041A4; EP1398048A1; EP1596896A4; US5176641A; WO2006122330A2; US6905474B2; US6749581B2; US6562000B2; WO2014072079A1; WO0156634A1; WO2004022136A3; WO9325262A1; US7270648B2; US8394061B2; US6283934B1; US7118548B2

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